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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,495	09/24/2001	Jorg Adler	P21094	2775
7055	7590	11/04/2003	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,495

Applicant(s)

ADLER ET AL.

Examiner

Krishnan S Menon

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-41 is/are pending in the application.
- 4a) Of the above claim(s) 29-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 19-28 in Paper dated 8/18/03 is acknowledged. The traversal is on the ground(s) that 37 CFR 1.475(b)(1) states that an international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn to a product and a process specially adapted for the manufacture of said product. In the instant situation, independent claim 19 in Group I is directed to a ceramic multi-layer filter. Moreover, claim 29 is directed to a process for producing a ceramic multi-layer filter. Accordingly, it is readily evident that the claims of Groups I and II satisfy unity of invention in accordance with 37 C.F.R. 1.475. This is not found persuasive because the inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of claim 19 is 'ceramic multi-layer filter', which is shown by DE 195 12 146 A to lack novelty or inventive step and does not define a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

Applicant is reminded that since the product claims are elected, process claims would be allowable if product claims are found allowable and if the process claims contain all the limitations or are dependent on the product claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-23, and 25 - 28 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over WO/30207 A1.

Claim 19: WO/30207 teaches a ceramic multiplayer filter comprising at least two layers (see examples) having same or different materials (pages 4 and 5) and different particle sizes (examples), one of it being a support layer (examples), materials of similar thermal coefficient of expansion (see pages 1,2), particles wet by wetting material (glass, for example – see specification), pore volume and pore size reduced by the material only partially and no more than 50% (powder to binder ratio being set at 5:1 would have this less than 50% - examples). In any case, the degree of reduction of pore size/volume is inherent since the ref has the same or similar material for the ceramic multiplayer filter. Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. “There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102.” In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims.

Claim 20: multi layer in which the particle size decrease in direction going away from the support – see page 7

Claims 21, 22, 23: the ceramic material could be the same in all layers, silicon carbide or alumina, and same surface wetting material – see spec and examples.

Claims 25 and 26: pore volume and pore size reduced only slightly by the material, and not more than 10%. The ref does not specifically say that, but this would be inherent because the ref has same or similar materials for the ceramic multiplayer filter.

Claim 27: particle size ratio between 1:5 and 1:10: particle sizes from 1 nm to 500 nm and agglomerates from 10 to 500 microns are described for use in various layers.

Claim 28: the support layer average particle size would fall within the range of particle size given by WO'207.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO/30207 A1 in view of Partlow et al (US 5,683,528).

WO teaches all the limitations of claim 19. Claim 24 adds further limitation of the type of glass used, which WO has not specified. Partlow teaches borosilicate glass in the ceramic layers (col 2 lines 10-30). It would be obvious to one of ordinary skill in the art at the time of invention to have the teaching of Partlow in the teaching of WO'207 for the glass because WO'207 does not specify the glass; and also for its thermal expansion coefficient.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant's attention is directed to Ravagni et al (US 6,576,182 B1), which is a corresponding US patent issued under §371 of WO/30207 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 703-305-5999. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Krishnan Menon
Patent Examiner